

## ABSTRACT

The invention refers to a method for enhancing the ratio between the main lobe (5) and grating lobes (7) in an antenna array (1) comprising a number of n antenna elements (2). The method comprises the steps of;

- 5    - receiving analog signals on a number of m antenna array (1) elements (2);  
      -producing a radiation diagram for the array (1) from the values in the signals.  
The method is characterised in that a number of antenna elements (2') are switched off or reduced during different times and that the corresponding radiation diagrams for the different times are added to each other such that a  
10   sum radiation diagram is produced.

The invention also refers to an antenna array system comprising means for performing the method.

(Fig. 6)